

Listing of the Claims:

Please cancel Claims 1-48, 50 and 54-60 without prejudice or disclaimer.

49. (currently amended) A method of preventing or treating a bone disorder associated with loss of bone density comprising administering a therapeutically effective amount of an OPG polypeptide comprising a truncation of the amino acid sequence from residues 22 to 401 shown in SEQ ID NO:125, wherein the polypeptide has the activity of inhibiting bone resorption the polypeptide of Claim 19.

51. (original) The method of Claim 49 wherein the bone disorder is excessive bone loss.

52. (currently amended) The method of Claim 49 wherein the bone disorder is selected from the group consisting of osteoporosis, Paget's disease of bone, hypercalcemia, hyperparathyroidism, steroid-induced osteopenia, bone loss due to rheumatoid arthritis, bone loss due to osteomyelitis, osteolytic metastasis, osteonecrosis, and periodontal bone loss, and osteopenia associated with surgery, disorders of the small and large intestines, and with hepatic and renal diseases.

53. (currently amended) The method of Claim 49 further comprising administering a therapeutically effective amount of a substances selected from one or more the group consisting of bone morphogenic proteins BMP-1 through BMP-12, TGF- β family members, IL-1 inhibitors, TNF- α inhibitors, parathyroid hormone and analogs thereof, parathyroid hormone related protein and analogs thereof, E series prostaglandins, bisphosphonates, and bone-enhancing minerals.

61. (new) The method of Claim 49 further comprising administering a therapeutically effective amount of a factor which stimulates bone formation.

62. (new) The method of Claim 49 wherein the OPG polypeptide comprises a carboxy terminal truncation of the amino acid sequence from residues 22 to 401 shown in SEQ ID NO:125.

63. (new) The method of Claim 62 wherein the OPG polypeptide comprises from 1 to about 216 amino acids deleted from the carboxy terminus.

64. (new) The method of Claim 49 wherein the OPG polypeptide comprises from 1 to about 10 amino acids deleted from the amino terminus.

65. (new) The method of Claim 49 wherein the OPG polypeptide comprises amino acid residues 22-185, 22-189, 22-194 or 22-201 inclusive shown in SEQ ID NO:125.

66. (new) The method of Claim 49 wherein the OPG polypeptide comprises amino acid residues 27-185, 27-189, 27-194 and 32-401 inclusive shown in SEQ ID NO:125.

67. (new) The method of Claim 49, 62, 63, 64, 65 or 66, wherein the OPG polypeptide further comprises an Fc region of human IgG or a derivative of an Fc region of human IgG.

68. (new) The method of Claim 67 wherein the OPG polypeptide comprises an Fc region linked to an OPG polypeptide comprising amino acid residues 22-194 as shown in SEQ ID NO:125.

69. (new) The method of Claim 49 wherein the OPG polypeptide is modified with a water soluble polymer.

70. (new) The method of Claim 69 wherein the water soluble polymer is polyethylene glycol.

71. (new) The method of Claim 49 wherein the OPG polypeptide is a multimer.

72. (new) The method of Claim 71 wherein the OPG polypeptide is a dimer.

73. (new) The method of Claim 71 wherein the OPG polypeptide is a trimer.

74. (new) The method of Claim 71 wherein the multimer is formed by at least one linker molecule.

75. (new) The method of Claim 71 wherein the multimer is formed by association of Fc regions of human IgG or Fc regions derived from human IgG.

76. (new) The method of Claim 71 wherein the multimer is formed by at least one interchain disulfide bond.